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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/009,873	11/01/2002	Anand Ranganathan	SHW-009US	4622

959 7590 08/12/2005  
LAHIVE & COCKFIELD, LLP.  
28 STATE STREET  
BOSTON, MA 02109

EXAMINER
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LU, FRANK WEI MIN

ART UNIT	PAPER NUMBER
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1634

DATE MAILED: 08/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/009,873

Applicant(s)

RANGANATHAN, ANAND

Examiner

Frank W. Lu

Art Unit

1634

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-48 are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Election/Restrictions*

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claims 1-21, drawn to a method of assembling several DNA units in sequence.

Group III, claims 22, 24-26, 29, 32-43, 47, and 48, drawn to a DNA construct (claim 22), a plurality of host cells (claim 24), a plurality of transformed hybrid host cells (claim 25), a compound (claim 26), a transformed host (claim 29), a library of DNA units (claims 32-36), a module (claims 37-41), a vector (claims 42 and 43), a host lacking a recA function (claim 47), and a kit (claim 48).

Group III, claim 23, drawn to a synthetic enzyme.

Group IV, claims 27, 28, 30, and 31, drawn to a method of synthesizing or producing a target molecule.

Group V, claims 44-46, drawn to a method of transforming a host.

2. The inventions listed as Groups I to V do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

Groups I and II do not relate to a single general inventive concept under PCT Rule 13.1

Art Unit: 1634

because the technical feature linking Groups I and II is not special since a DNA construct in claim 22 of Group II is not a contribution over the prior art (see column 14 in US Patent No. 5,374,553 wherein a vector comprising a DNA encoding a Tma polymerase is a DNA construct in claim 22).

Groups I and III do not relate to a single general inventive concept under PCT Rule 13.1 because they lack the same or corresponding special technical features. For example, step a) of claim 1 in Group I is not required for Group III while a synthetic enzyme of Group III is not required for Group I.

Groups I and IV do not relate to a single general inventive concept under PCT Rule 13.1 because they lack the same or corresponding special technical features. For example, step a) of claim 31 in Group IV is not required for Group I.

Groups I and V do not relate to a single general inventive concept under PCT Rule 13.1 because they lack the same or corresponding special technical features. For example, step a) of claim 1 in Group I is not required for Group III while step a) in claim 48 of Group III is not required for Group I.

Group II and Groups III to V do not relate to a single general inventive concept under PCT Rule 13.1 because the technical feature linking Group II and Groups III to V is not special since a DNA construct in claim 22 of Group II is not a contribution over the prior art (see column 14 in US Patent No. 5,374,553 wherein a vector comprising a DNA encoding a Tma polymerase is a DNA construct in claim 22).

Groups III and IV do not relate to a single general inventive concept under PCT Rule 13.1 because they lack the same or corresponding special technical features. For example, a

Art Unit: 1634

synthetic enzyme of Group III is not required for Group IV while step a) of claim 31 in Group IV is not required for Group III.

Groups III and V do not relate to a single general inventive concept under PCT Rule 13.1 because they lack the same or corresponding special technical features. For example, a synthetic enzyme of Group III is not required for Group V while step a) of claim 44 in Group V is not required for Group III.

Groups IV and V do not relate to a single general inventive concept under PCT Rule 13.1 because they lack the same or corresponding special technical features. For example, step a) of claim 31 in Group IV is not required for Group V while step a) of claim 44 in Group V is not required for Group IV.

3. This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows:

- (1) one or more of the DNA units are derived from polyketide synthesizing enzyme domain DNA sequences (claim 17)
- (2) one or more of the DNA units are derived from peptide synthesizing enzyme domain DNA sequences (claim 18)
- (3) one or more of the DNA units are derived from hybrid peptide polyketide enzyme domain DNA sequences (claim 19)
- (4) one or more of the DNA units are derived from fatty acid synthesizing enzyme domain DNA sequences (claim 20)

Art Unit: 1634

Applicant is required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

4. The claims are deemed to correspond to the species listed above in the following manner:

The following claim(s) are generic: claims 1-16 and 21.

5. The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons:

The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because the species lack the same or corresponding special technical features since one or more the DNA units in species (1) to (4) contain different DNA sequences.

6. Papers related to this application may be submitted to Group 1600 by facsimile transmission. Papers should be faxed to Group 1600 via the PTO Fax Center. The faxing of such papers must conform with the notices published in the Official Gazette, 1096 OG 30

Art Unit: 1634

(November 15, 1988), 1156 OG 61 (November 16, 1993), and 1157 OG 94 (December 28, 1993)(See 37 CAR § 1.6(d)). The CM Fax Center number is either (703) 872-9306.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frank Lu, Ph.D., whose telephone number is (571)272-0746.

The examiner can normally be reached on Monday-Friday from 9 A.M. to 5 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, W. Gary Jones, can be reached on (571)272-0745.

Any inquiry of a general nature or relating to the status of this application should be directed to the Chemical Matrix receptionist whose telephone number is (703) 308-0196.

Frank Lu  
PSA  
August 1, 2005

  
**FRANK LU**  
**PATENT EXAMINER**